AIR AND WATER QUALITY

The quality of the air and water around us affects everyone on a local and global scale. The City is taking steps to address both air and water quality issues.

AIR QUALITY



Understanding and improving the air quality of Hamilton is a complex task. Most people take it for granted that heavy industry is responsible for the City's air quality concerns. But did you know there are other sources of poor air quality including: road dust, wind blown dust from construction sites or ploughed fields and, fossil fuel emissions (cars, trucks, buses, trains, air planes, etc.).

Local Air Quality Concerns

The Provincial Ministry of the Environment and Energy continuously monitors air quality with 47 stations located throughout the City to detect such pollutants as dust and odours.

The Ministry has identified three main air pollution problems: the industrial impact on the nearby residential area (occasional odours, organic pollutants and dust fallout); short term pollution build-ups throughout the City from vehicle traffic and industry during the spring and fall; and, high ozone levels in summer, due to long range transport of pollutants. The effect of these pollutants impact on health, the quality of life, vegetation and wildlife.

The Ministry reports that generally the quality of air in Hamilton has improved since they first started monitoring in the early 1970s.



Global Air Quality Concerns

Globally, some of the most important air quality issues are ozone depletion and the greenhouse effect. Ozone in the upper atmosphere protects us from the sun's damaging ultraviolet rays. Over the past several decades, ozone depleting compounds have damaged the earth's ozone layer. Ozone depletion has been linked to increased risk of skin cancer and to possible damage to fisheries, forests, and food production.

Greenhouse gases absorb the sun's energy but partially block outgoing radiated heat. This causes the earth's lower atmosphere to warm up, much like the inside of a greenhouse. About half of the greenhouse effect is caused by carbon dioxide, resulting from fossil fuel emissions, chlorofluorocarbons, methane, and nitrous oxides are other greenhouse gasses.

"Atmospheric change is not just another environment issue, atmospheric change means we have to change" Cloud of Change - City of Vancouver

What's being done to improve air quality?

The Provincial Ministry of Environment and Energy administers the Environmental Protection Act (legislation regulating air quality). It regulates discharges into the air. Certificates of Approval are required from the Ministry to discharge contaminants into the air. Under the Act, the Ministry responds to problems concerning odour and dust.

The **City** undertakes some measures to reduce air pollution such as:

- ☆ regular and frequent street cleaning;
- requiring developers to pave parking areas and re-sod to stabilize exposed soils;
- ☆ reducing speed limits on unpaved roads;
- ☆ appling dust control agents on unpaved roads.

What does the Official Plan Say About Air Quality?

Policies in the Official Plan:

- support higher levels of government to reduce levels of air pollution from beyond the City;
- ☆ prohibit development that does not conform with Provincial policies on air quality;
- ☆ ensure that landfill sites are adequately secured to prevent erosion;
- require hard surfacing parking areas, road cleaning, and minimizing speed limits on unpaved roads.

What changes are we ready to make to improve the air quality?

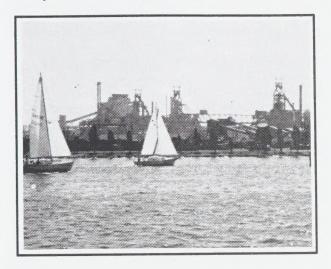
What air quality issues are not being adequately addressed?

Is the City doing enough to address air quality issues?

What more should be done?

Water Quality

The Indian name "Macassa", for the Hamilton Harbour can bring a twinge of nostalgia. Macassa means "sparkling water". You can still see the sun sparkle on the Harbour and Lake Ontario as you cross the High Level or Skyway Bridges. Though the view is spectacular, the reality is something else again.



What Affects Water Quality?

The main factors affecting water quality include: discharges from sewage treatment plants (Hamilton, Dundas, Burlington); urban stormwater and agricultural runoff; industrial discharges; recreational boating and shipping; algae decay; and, accidental spills in the Harbour, Lake Ontario, creeks and rivers draining into them.

What does poor water quality mean?

Poor water quality can mean: a reduction/loss of fish and wildlife habitat; health risks from bacteria resulting in a prohibition of swimming in Harbour and limiting swimming in Lake Ontario; aesthetics (unpleasant smell, clarity of water, floating debris); loss of commercial fishing; and, reduction/loss of recreational uses (swimming, fishing, boating).

What's being done to improve our water quality?

In 1985, the International Joint Commission identified Hamilton Harbour as an "area of concern", that is "the environmental quality is degraded and beneficial uses of the water and biota [flora and fauna] are adversely affected". The concentration of some contaminants, the level of contamination of the Harbour bottom, together with the continued input from municipal, industrial, storm water run-off and other land-based sources, contributed to the Harbour's poor state.

1 The Remedial Action Plan (RAP)

The Remedial Action Plan (RAP) is a cleanup strategy developed jointly by citizens, government and industry from the Bay area. Its goal is to:

- \(\text{improve water quality and habitat in the Hamilton Harbour and Cootes Paradise;} \)
- O re-establish a healthy aquatic ecosystem; and,
- improve the potential for more extensive recreational uses while maintaining the Harbour's essential economic function.

The 50 recommendations cover a broad range of initiatives designed to improve water quality in the Harbour and the larger watershed including:

- improvements to municipal sewage treatment plants
- △ erosion control
- of fish and wildlife habitat restoration
- O reduction of pesticide use
- increase public access
- and encourage water conservation





2 BARC - Bay Area Restoration Council was established in 1991 to oversee the



implementation of the RAP. An important part of the Council's role is to promote access to the Bay, to enable people to experience the area, and become active players in cleanup efforts. Membership includes individual citizens, and organizations from the agricultural, industrial, recreational, governmental, institutional and environmental sectors.

3 Fish and Wildlife Habitat Restoration Project



This initiative arose out of the RAP and its goal to address the restoration of fish and wildlife habitat in the Harbour and Cootes Paradise. Eight initiatives were identified for restoring habitat in Hamilton Harbour and Cootes Paradise including:

- Waterfront Park and Pier 4 (fish and wildlife habitat, public access)
- Cootes Paradise (marsh restoration, public access)
- Windermere Basin (colonial bird nesting).

4 Conservation Authorities

The Hamilton Region Conservation Authority carries out activities in water and related land management programs (including erosion and flood control, wetlands protection and water quality monitoring), and conservation and recreation land management. Both the Hamilton and Halton Region Conservation Authorities have been active partners in the implementation of the RAP.

What Does the Official Plan Say About Water Quality?

Policies in the Official Plan:

- Support the government efforts to reduce pollution;
- prohibit development that does not conform with Provincial policies on water quality;
- O encourage reduction of pollution in the Harbour, Cootes Paradise, Lake Ontario and watercourses (ensure discharges by industry, storm sewers, municipal sewage treatment, or others will be of adequate quality to satisfy the minimum standards for recreational use);
- densure landfill sites are adequately secured from surface water drainage as per established engineering practices.

What water quality issues are not being adequately addressed? Is the City doing enough in addressing water quality issues? What more should be done?

For further information on this brochure, please contact Caroline Floroff at (905) 546-4424.

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CITYVIEW

CityView Hamilton's Plan for Tomorrow is your opportunity to present your ideas and thoughts on the future of Hamilton.

Your ideas will ultimately form the basis of a new Official Plan for the City of Hamilton.

Staff of Hamilton's Planning and Development Department are available to answer your questions on any facet of CityView.

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